

Changes in Opioid Prescribing Habits After Implementation of Electronic Prescription Drug Monitoring Program

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Background

- Opioids are appropriately indicated for acute post operative pain, but patients are often prescribed more doses than required.
- Electronic prescription drug monitoring programs aim to curtail excess opioids
- The state of Wisconsin implemented a mandatory electronic Prescription Drug Monitoring Program (ePDMP) in 2017
- Goal: to establish effect of ePDMP on prescribing patterns of pediatric urologist at our institution

Methods

- A retrospective review was performed on 695 children at a single institution
- Consisted of 6 surgeons who performed outpatient urologic procedures from August 2016 to December of 2017
- Patients were separated into two groups:
 - Patients who underwent surgery **before** the implementation of ePDMP
 - Patients who underwent surgery **after** ePDMP implementation
- Patient characteristics, type of procedure performed, and amount of opioids prescribed were collected

	Pre-ePDMP	Post-ePDMP	p value
Patients	304	391	
Age	5.44	5.65	0.55
Weight	23.9	24.9	0.497
Race			0.469
White	196	269	
Black	49	62	
Asian	29	25	
American Indian	1	3	
Other	31	30	
Dose of opioids	19.8	14.1	<0.001
Surgery			0.546
Circumcision	98	139	
Inguinal Hernia Repair	32	35	
Inguinal Orchidopexy	120	139	
Other	54	78	
Prescribed opioids (%)	93.10	87.7	0.019

	OR of Narcotic Rx	95% CI	OR of >10 doses	95% CI
Pre-PDMP	-	-	-	-
Post-PDMP	0.53	0.29-0.89	0.44	0.26-0.75
Circumcision	-	-	-	-
Inguinal Surgery	1.94	1.88-5.79	1.41	1.12-4.54
Age	1.64	1.42-1.91	1.29	1.2-1.4

Multivariable Analysis

- Controlling for patient age, type of surgery, and attending surgeon of record
 - Surgery after ePDMP implementation was associated with 10 or less doses of narcotic prescribed
 - Surgery after ePDMP implementation was NOT a significant predictor of receiving any narcotic prescription after controlling for the above factors
 - Attending surgeon was a significant predictor for receiving a narcotic prescription and receiving 10 or less doses

Conclusions

What did ePDMP do?

- Decreased average doses of narcotics

What did ePDMP NOT do?

- Decrease percent of children given narcotics Rx

Individual surgeon prescribing habits remain highly variable